

AMENDMENTS TO THE SPECIFICATION

On page 1, line 3 of the specification, please insert the following new paragraph:

(New) This application is a divisional application of co-pending Application Serial No. 09/769,964, filed January 24, 2001, which is incorporated herein by reference in its entirety and to which application we claim priority under 35 USC §120.

Please amend the paragraph beginning on page 5, line 27 as follows:

(Currently Amended) Optionally, a flexible sleeve may be positioned over the articulating joints and the rotational joints of the maneuverable arm. The flexible sleeve may comprise an elastomer, such as silicone or dip molded PVC, for example. Preferably, the flexible sleeve comprises a material having a four or six way stretch, such as LYCRA®, or SPANDEX (elastomeric fabric of fibers containing polyurethane) ~~LYCRA OR SPANDEX~~, for example.

Please amend the paragraph beginning on page 15, line 30 as follows:

(Currently Amended) In the example shown, the first and second platform blades 110 include mount features in the form of rails 160. Optionally, a mount feature may also be included on the rack bar 115. The rails 160 allow stabilizer 10 (and other instruments) to be positioned at any desired location along the operable length of either rail. The rails ~~60~~ 160 may be oriented substantially perpendicular to the direction of separation of the blades 110, or in a more curvilinear fashion. In this example, the rails ~~60~~ 160 extend upwardly from the bodies of the platform blades 110, although they may be formed alternatively as recessed features or in another configuration. However, the upwardly extending configurations are adapted to connect with the stabilizers having connecting features as shown in the examples. Of course, it would be possible to provide stabilizers having connecting features adapted to connect with recessed rails or rails having some other connecting feature.

Please amend the paragraph beginning on page 16, line 22 as follows:

(Currently Amended) Stabilizer 10 further includes a highly maneuverable arm 30 which connects the contact member 20 through a base member 40 to a tightening mechanism 50 at the proximal end of the device. The maneuverable arm 30 includes multiple articulating joints which enable the contact member 20 to be positioned and set at a wider variety of positions, virtually enabling the contact member to be used for any target site in performing anastomoses according to the present invention. The multiplicity of articulating joints allow versatile positioning, and a cable 288 which runs through each of the joints and interconnects them with the tightening mechanism 50, may be tensioned to freeze the selected orientation of the device in a rigid configuration. In this way, the contact member 20 can be maintained at the desired orientation to provide stabilization to that portion of the heart tissue with which it makes contact, as well as the immediately surrounding area.

Please amend the paragraph beginning on page 17, line 27 as follows:

(Currently Amended) The outer surface of the socket cap 260 is substantially cylindrical and adapted to slidably and rotatably fit within the cavity of the coupling member 240 introduced by the proximal opening 246. This allows rotation of the contact member about the longitudinal axis of the maneuverable arm when the stabilizer is in a non-rigid state. The proximal portion of the socket cap 260 includes driving surfaces 264 adapted to abut against the distal most articulating member 310 and transmit force against the ball portion 222 via cap portion 262 when the cable is tensioned. In the example shown in Figure 3A, driving surfaces 264 are located on tabs 266 which are dimensioned to be received in slots 312 314 in the distal most articulating member 310. In this embodiment, upon complete release of tension in the stabilizer 10, the socket member 240 may be pulled in a direction away from the distal most articulation member 310 by a sufficient distance to allow ball portion 222 to be extracted through opening 242, for example to change the setup by replacing the existing contact member 20 with a different one. Thus, a change may be made between contact members to choose a different design or configuration, or even to change to one which operates on a different principle. For example a change from a mechanical contact member, which operates by applying physical pressure against the beating heart tissue, may be replaced with a negative pressure contact member, which engages the heart by vacuum. In this regard, any of the contact members described herein could be exchanged for operation in the stabilizer 10 described. Additionally, other known contact members could be used or adapted to be used by those of ordinary skill in the art. This

interchangeability is made possible by the notches ~~312~~ 314 which allow separation of the tabs 266 therefrom.

Please amend the paragraph beginning on page 18, line 16 as follows:

(Currently Amended) Alternatively, the notches ~~312~~ 314 may be replaced by enclosed holes ~~312~~ 314' (see Figure 3C) which maintain the capture of tabs 266 even when the tension is fully relieved in the stabilizer 10. In this case, the socket member 240 cannot be separated from the distal most articulating member 310' and coupling members 260, 280 and 290 by a sufficient distance to remove ball portion 222 through opening 242 (unless a shim within the mount is removed as described below). While this arrangement eliminates the ability to easily interchange contact members, it has the advantage of ensuring that the contact member will not become accidentally disengaged or removed, regardless of the amount of tension (or lack thereof) in the stabilizer 10.

Please amend the paragraph beginning on page 30, line 20 as follows:

(Currently Amended) Although the sleeve could be formed of an elastomer such as silicone or dip molded PVC, for example, it has been found that the flexibility of the links about an axis perpendicular to the longitudinal axis of the maneuverable arm 330 may be limited by such a sleeve, although rotation about the longitudinal axis is not so limited. It has been found that superior results may be achieved by using a material that has more axes of elasticity, such as a knitted LYCRA® or SPANDEX ~~Lyera or Spandex~~ material having a four or six way stretch. Such a sleeve 460 does not preload the maneuverable arm significantly so as to restrict its flexibility in either of the motions discussed above. Any of the sleeve materials serves the function of further ensuring that no foreign materials (e.g., sutures, surgeon's gloves, etc.) will be trapped or snagged in any of the articulation joints of the maneuverable arm 330. An additional advantage of a sleeve 460 is that it provides an extra degree of integrity to the maneuverable arm 330, helping maintain each of the links in its intended position. Further, if there should be a failure in the cable 288 or other factor causing disintegration of the device, the sleeve 460 would prevent loss of links and maintain the integrity of the device.

Please amend the paragraph beginning on page 33, line 18 as follows:

(Currently Amended) As knob 560 is torqued in a clockwise direction, threads 522 and 452 engage to draw screw 440 in a proximal direction with respect to stabilizer 10. Torque member 520 is stopped from movement in the distal direction when its distal surface abuts against the proximal surface of proximal portion 40b of mount 40. Since screw ~~44~~ 440 is securely fixed to cable 288, it draws cable 288 in the proximal direction as it moves, thereby lacing the cable under tension. This draws stop member 282 against coupling member 290 which is also drawn in the proximal direction and tines 294 at the same time draw socket member 240 in the proximal direction. Abutment of the distal most link 310 against driving surfaces 264 maintains socket cap 260 stationary relative to the movement of socket member 240, which causes a compression of ball 222, thereby fixing heart contact member 20.

Please amend the paragraph beginning on page 39, line 29 as follows:

(Currently Amended) In the example shown in Figure 15A, a pair of vacuum lines 710 are connected to the heart contact member 700, as noted above. It should further be noted that any of the arrangements employing negative pressure could be so connected, and that any alternative arrangements for supplying vacuum described herein can be applied to all negative pressure embodiments of the present invention. Vacuum lines 710 run adjacent to the maneuverable arm 30 and may be maintained in position by surrounding the maneuverable arm 30 and vacuum lines 710 with a flexible sleeve 760, which may be made of an elastomer, such as silicone or dip molded PVC, for example, or preferably of a material that has more axes of elasticity, such as a knitted ~~Lyera or Spandex~~ LYCRA® or SPANDEX material having a four or six way stretch. This maintains the vacuum lines 710 in a compact position against the sides of the links of the maneuverable arm 30, thereby ensuring that they do not obstruct the working space available to the surgeon.